

Subsequent Report of Abandonment

FILE NOTATIONS

Entered in NID File ☒

Entered On S R Sheet ☒

Location Map Pinned ☒

Card Indexed ☒

W R for State or Fee Land ☐

Checked by Chief ☒ **PMB**

Copy NID to Field Office ☒

Approval Letter ☐

Disapproval Letter ☐

COMPLETION DATA:

Date Well Completed ☐

SW ☐ WW ☒ TA ☒

SW ☐ SS ☐ PA ☐

Reason Inspected ☐

Reason Released ☐
State of Fee Land ☐

LOGS FREED

Driller's Log ☐

Electric Logs (No. 1) ☒ 12

Electric Logs (No. 2) ☐

Lat ☐ M/L (2) ☒

Ecl ☒ GBR ☐

Sepia ☐

GBRN ☐

M/HCO ☐

CONC ☐

CEMENT BOND LOG ☒ 2

2 Performing Depth Control + Casing Collar Log + Performing Record ☒ 4

6-8-92
LH

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☐

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

DAVIS OIL COMPANY

3. ADDRESS OF OPERATOR

1020 Midland Savings Building
Denver, Colorado

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

660' FSL - 660' FSL Sec 9 (22 1/2 Sec 9)

At proposed prod. zone

same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

35 miles from Hixon

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. line, if any)

660'

16. NO. OF ACRES IN LEASE

1436.44

17. NO. OF ACRES ASSIGNED
TO THIS WELL

80.00

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

4 miles

19. PROPOSED DEPTH

6000'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

will be forwarded under separate cover.

22. APPROX. DATE WORK WILL START*

February 29th, 1964

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-3/4"	8-5/8"	25#	400' ✓	120 cu

if production casing
set will run 9 1/2"

To test 200' into the Wasatch formation.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

DAVIS OIL COMPANY

SIGNED

Paul Messenger

TITLE

Exploration Manager

DATE

2-21-64

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

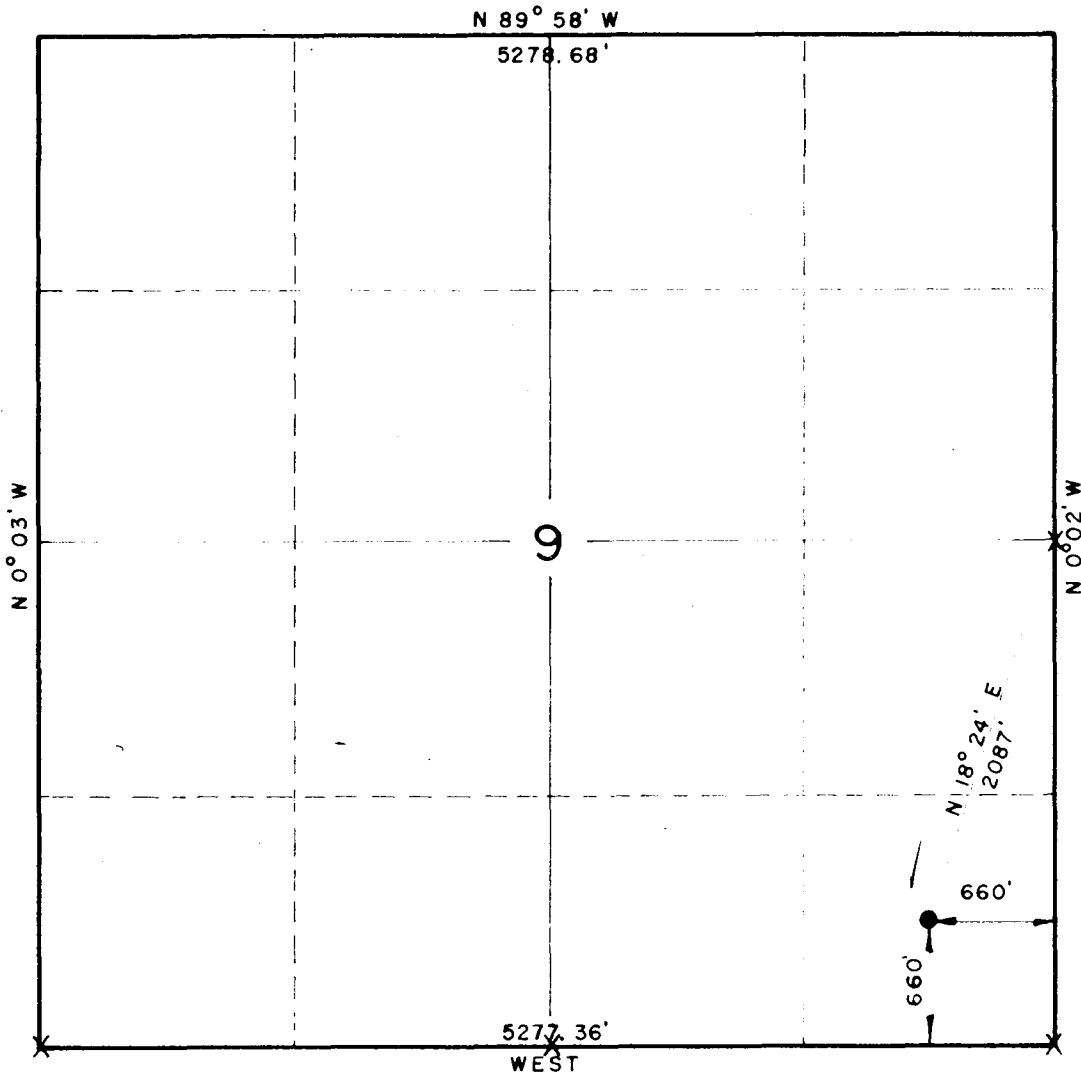
APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

T 9 S, R 18 E, SLB & M



X = Corners Located (Brass Caps)

Scale: 1" = 1000'

Nelson Marshall

BY: ROSS CONSTRUCTION CO.
Vernal, Utah

PARTY Gene Stewart
R. Stewart

WEATHER Cool-Clear

SURVEY
DAVIS OIL CO. PARIETTE BENCH UNIT WELL #5,
LOCATED AS SHOWN IN THE SE 1/4 SE 1/4 OF
SECTION 9, T 9 S, R 18 E, SLB & M, UTAH COUNTY,
UTAH

DATE 19 Feb. 1964
REFERENCES GLO Plat

FILE Davis

SUPERVISOR, OIL AND GAS OPERATIONS:

DESIGNATION OF AGENT

The undersigned is, on the records of the Geological Survey, Unit
Operator under the Pariette Bench Unit
Agreement, _____, I-Sec. No. 14-08-0001-6963
Approved October 5, 1960

and hereby designates

NAME: Davis Oil Company
ADDRESS: 1020 Midland Savings Bldg.
Denver, Colorado

as its agent, with full authority to act in its behalf in complying with the terms of the Unit Agreement and regulations applicable thereto and on whom the Supervisor or his representative may serve written or oral instructions in securing compliance with the Oil and Gas Operating Regulations with respect to:

Township 9 South, Range 18 East

Section 9: $S\frac{1}{2}$ $SE\frac{1}{4}$

Lease Serial No. U-019887
Uintah County, Utah

It is understood that this Designation of Agent does not relieve the Unit Operator of responsibility for compliance with the terms of the Unit Agreement and the Oil and Gas Operating Regulations. It is also understood that this Designation of Agent does not constitute an assignment of any interest under the Unit Agreement or any lease committed thereto.

In case of default on the part of the designated agent, the Unit Operator will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The Unit Operator agrees promptly to notify the Oil and Gas Supervisor of any change in the designated agent.

This Designation of Agent is deemed to be temporary and in no manner a permanent arrangement.

This Designation of Agent is limited to field operations and does not cover administrative action requiring Unit Operator's specific authorization.

PAN AMERICAN PETROLEUM CORPORATION

By: _____
Unit Operator

Copy M/C

DAVIS OIL COMPANY

OIL
PRODUCERS

1020 MIDLAND SAVINGS BLDG. • DENVER 2, COLORADO • Alpine 5-4661

NEW YORK, NEW YORK

DENVER, COLORADO

SALT LAKE CITY, UTAH

CASPER, WYOMING

ALBUQUERQUE, NEW MEXICO

February 22nd, 1964

C U. S. G. S.
506 Federal Building
Salt Lake City, Utah

RE: DAVIS OIL - #5 PARIETTE BENCH UNIT
SE SE, Sec. 9-9S-18E, of SLB&M
UINTAH COUNTY, UTAH

O Gentlemen:

P We herewith enclose for your approval an original and 2 copies of our Intent to Drill the captioned test, together with 3 copies of a Designation of Operator covering the drill site lease, and a copy of the official Staking Plat. Please be advised that the elevation for the well will be forwarded directly from the staker within the next few days.

P By copy of this letter we are forwarding 3 copies of the Intent to Drill together with 1 copy of the staking plat to the State of Utah Conservation Commission for their files.

Y We shall appreciate your early attention to approval of this location.

Yours very truly,

DAVIS OIL COMPANY

Paul Messinger
Paul Messinger
Exploration Manager

PM:pme

encls. as shown

CC: Mr. Cleon B. Feight
Utah Oil & Gas Conservation Commission
310 Newhouse Building
Salt Lake City 11, Utah

610

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4.

DATA SHEET

OPERATOR: Davis Oil Company
Denver, Colorado

WELL: Pariette Bench #5

LOCATION: C-SE-SE, Section 9, Township 9 South
Range 18 East
Uinta County, Utah

COMMENCED: February 28, 1964

COMPLETED: Testing.

ELEVATION: 4978 Ground Level, 4990 Kelly Bushing

TOTAL DEPTH: 6000'

SURFACE CASING: Ran 398' of 9 5/8" casing set at 400'
with 180 cubic feet of 50%-50% poz mix
cement and 2 sacks of flow seal.

PRODUCTION CASING: 5 1/2" casing set at 5596 Kelly Bushing
measurements with 255 sacks of cement.

CONTRACTOR: Signal Drilling Company

PUSHER: Roy Renfro

GEOLOGIST: Johnny C. Harrod - Denver, Colorado

TYPE MUD: Gel and oil

TYPE LOGS: Induction Electrical Survey, Micro-
laterolog with caliper, Sonic-gamma Ray
and continuous Dipmeter.

SAMPLES: Permanent file: American Stratigraphic
Denver, Colorado

SERVICE COMPANIES: Service Mud Company
Drilling and Service Inc.
Rocky Mountain Engineer
Virgis Testers
A. Lippharet Core Analysis
Schlumberger

FORMATION TOPS

<u>FORMATION</u>		<u>DEPTH</u>
UINTA	-	SURFACE
GREEN RIVER	-	1360
PARACHUTE CREEK	-	1610
DOUGLAS CREEK	-	2908
"R" SS. ZONE	-	4256
"S" SS. ZONE	-	4536
"T" SS. ZONE	-	4906
GREEN RIVER TONGUE	-	5705
WASATCH	-	5922

HOLE DEVIATION

<u>DEPTH</u>	<u>(FOOTAGE)</u>	<u>DEVIATION</u>	<u>(DEGREES)</u>
528		1.25	
745		1.50	
800		1.25	
1058		1.50	
1309		1.00	
1670		1.00	
2086		1.50	
2362		1.50	
2850		1.75	
3112		--	
3873		2.25	
4097		2.50	
4993		3.25	

GEOLOGICAL RESUME

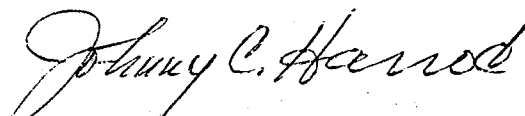
In drilling through the Uinta formation, porous water sands that carried minor shows of methane gas were encountered as high as 800'. Bodies of sandstone from 5- 20 feet in thickness and carrying "Trona-water" were encountered at depths from 1490' in the Evacuation Creek of the Green River formation down through 3450' in the Douglas Creek member of the same formation. As these zones were drilled, the mud would become flocculated by the detergent action of the sodium bicarbonate. Consequently, it was necessary to keep the weight of the mud at 10.0 to 10.5 pounds. In future drilling, I believe that one should consider drilling through these zones with native mud and dump the drilling fluid prior to mudding up with a gel-base mud. In any event, analyses of the native drilling mud and of the make-up water to be used should be made by the mud engineer servicing the well.

Prospective sand zones were encountered in the Douglas Creek as high as 3750'. Gas kicks ranging from 20 to 90 units were recorded in a very fine, poorly sorted, hard sand with disseminated stain. However, the major zones of interest extend from 4050- 5600'. The sand bodies are lenticular and of varying thickness. Lack of winnowing by wave action results in silt contamination which in turn reduces the permeability and porosity.

Fast drilling breaks that are associated with thin (3-7') zones of ostracodol limestones and marlstone occur throughout the above interval. These ostracodol zones are generally associated with minor amounts of primarily methane gas.

CONCLUSION

The fluid recovery from DST #2 was extremely encouraging for exploration of the Douglas Creek-Delta Facies in this area. The apparent strand line of sand deposition during this period extends in an east to west direction. The sands tend to feather out to the west in the proximity of the Soldier's Summit area in southeastern Wasatch County. Whereas, to the east abundant alga reefs are encountered in the Douglas Creek near the Utah-Colorado state line.


Johnny C. Harrod

3-13-64 Drilling at 4290'. Mud: weight -10.1 pounds, viscosity -43 seconds.

3-14-64 Tripping at 4468' for Bit #22. Mud: weight -9.95 pounds, viscosity -40 seconds, water loss -8.8%, Oil -6%.

3-15-64 Tripping at 4655' for Bit #24. Mud: weight -10.3pounds, viscosity -40 seconds.

3-16-64 Drilling at 4770'. Mud: weight -10.1 pounds, viscosity -46 seconds, water loss -8.2%.

3-17-64 T.D. 4875'. Preparing to run DST #2 at 4860½-4875'. Mud: weight -10.2, viscosity -48 seconds, water loss -8.2 %.

3-18-64 Tripping at 4993' for Bit #27. Mud: weight -10.2, viscosity -43 seconds.

3-19-64 Drilling at 5153'. Mud: weight -10.1 pounds, viscosity -39 seconds.

3-20-64 T.D. 5411'. Preparing to core. Mud: weight -10.1 pounds, viscosity 44 seconds, water loss -8%.

3-21-64 T.D. 5460'. Going in hole with Bit #30, cored 49' from 5411-5460' and ran DST #3 at 5436-5460'.

3-22-64 Drilling at 5704'. Mud: weight -10.2 pounds, viscosity 40 seconds.

3-23-64 Tripping at 5908' for Bit #33. Mud: weight -10.2 pounds, viscosity -40 seconds. Reached T.D. of 6000' at 7:15 P.M.

3-24-64 Running Electrical Surveys until approximately 2:30 P.M. Went into hole with drill pipe to condition hole and wait on orders.

3-25-64 Waiting on orders. Came out of hole to lay down drill collars and prepare to run casing.

CHRONOLOGICAL WELL HISTORY

<u>DATE</u>	<u>DESCRIPTION OF ACTIVITY</u>
2-27-64	Moving in rotary and rigging up.
2-29-64	Drilling to 400', setting surface casing, cementing and nipling up.
3--1-64	Drilled out from under surface casing at 4:00 P.M.
3--2-64	Drilling at 875' with native mud.
3- 3-64	Tripping at 1670' for Bit #4. Commenced carrying methane gas at 960' in Uinta and Green River formations. Picked up "trona" water zones at 1500' in the Green River.
3- 4-64	Tripping at 2210' for Bit #6, carrying methane gas in drilling fluid.
3- 5- 64	Drilling at 2515'. Commenced mudding up at 2300'. Trona water in drilling fluid causes mud to become foamy and light. Mud program on tour basis: Gel.- 25 sacks; caustic soda 50 pounds; fiber - 20 sacks; wood flakes - 5 sacks and weight material - 25 sacks or more. Mud program recommended to keep mud weight at 10.0 pounds, viscosity at 35-38 and water loss at 10-15.
3- 6-64	Drilling at 2823'. Twisted off at 2652'. Ran DST #1 at 2911 -2937' in the Douglass Creek.
3- 7-64	Going into hole with Bit #11.
3- 8-64	Drilling at 3165'.
3- 9-64	Drilling at 3368'. Mud: weight -10.3 pounds, viscosity -41 seconds.
3-10-64	Tripping into hole with Bit #16 at 3606'. Mud: weight 10.1 pounds, viscosity -40 seconds, water loss -9.6%.
3-11-64	Drilling at 3872'. Mud: weight -9.9 pounds, viscosity 37 seconds. Commenced adding diesel oil to mud system at 3895'.
3-12-64	Drilling at 4092'. Mud: weight -10.1 pounds, viscosity 45 seconds, water loss 10%, oil 6-7%.

BIT RECORD

NO.	SIZE	DEPTH	DEPTH	TOTAL FOOTAGE	TOTAL DRILLING	
		IN	OUT		HOURS	
1	8.75	403	800	397	10:00	Minutes
2	8.75	800	1309	509	9:45	"
3	8.75	1309	1670	361	10:45	"
4	8.75	1670	2086	416	7:40	"
5	8.75	2086	2210	124	4:30	"
6	8.75	2210	2362	152	7:05	"
7	8.75	2362	2451	89	3:45	"
8	8.75	2451	2652	201	9:10	"
9	8.75	2652	2850	198	11:00	"
10	8.75	2850	2937	87	5:25	"
11	8.75	2937	3112	175	13:10	"
12	8.75	3112	3249	137	9:45	"
13	8.75	3249	3350	101	7:35	"
14	8.75	3350	3439	89	5:00	"
15	8.75	3439	3606	167	12:15	"
16	8.75	3606	3799	193	13:50	"
17	8.75	3799	3949	150	13:35	"
18	8.75	3949	4097	148	12:30	"
19	8.75	4097	4205	108	8:45	"
20	8.75	4205	4339	134	10:30	"
21	8.75	4339	4468	129	12:50	"
22	8.75	4468	4553	85	7:00	"
23	8.75	4553	4655	102	7:50	"
24	8.75	4655	4748	93	9:05	"
25	8.75	4748	4836	88	8:15	"
26	8.75	4836	4993	157	11:45	"
27	8.75	4993	5120	127	12:15	"
28	8.75	5120	5328	208	10:25	"
29	8.75	5328	5411	83	5:25	"
30	8.75	5460	5611	151	13:20	"
31	8.75	5611	5765	154	12:20	"
32	8.75	5765	5908	143	11:40	"
33	8.75	5908	6000	92	7:15	"

DRILL STEM DATA

D.S.T. #1

2911- 2937 (Douglas Creek) T.D. 2937
Tool open 4 minutes. Had a fair blow. Shut tool in for 30 minutes. Reopened tool for 90 minute flow period. Had a fair steady blow throughout flow period. Shut tool in for 70 minute final shut in pressure.

Recovered 90' water cut mud with a scum of oil; 90' mud cut water slightly gas cut and 910' water slightly gas cut and salty with a faint odor of ammonia.

I.S.I.P.	30 minutes	-----	1420#
F.S.I.P.	70 minutes	-----	1420#
I.F.P.		-----	142#
F.F.P.		-----	600#
I.H.H.		-----	1600#
B.H.T.		-----	94°F

D.S.T. #2

4860.5-4875 (4856.5- 4871.5 Log measurements)
T.D. 4875.

Tool open 4 minutes with a good blow. Shut tool in for 30 minutes. Reopened tool for 75 minute flow period. Had a good steady blow for 25 minutes that decreased to a fair blow for remainder of open period. Had gas to the surface in 30 minutes. Too small to measure. Shut tool in for 60 minute final shut in pressure.

Recovered 230' gas cut, black oil and 270' mud and gas cut, black oil.

I.S.I.P.	30 minutes	-----	1581#
F.S.I.P.	60 minutes	-----	971#
I.F.P.		-----	95#
F.F.P.		-----	168#
I.H.H.		-----	2497#
F.H.H.		-----	2470#
B.H.T.		-----	134°F

D.S.T. #3

5436-5460 (Black shale facies) T.D. 5460
Tool open 4 minutes. Had a very weak blow. Shut tool in for 45 minutes. Reopened tool for 45 minutes. Had a very weak blow for 15 minutes and blow died. Waited 15 minutes and reset packer. Had a very weak blow for 15 minutes and died. Shut tool in for 60 minute final shut in pressure.

Recovered 90' drilling mud with a trace of oil at top.

DRILL STEM DATA

D.S.T. #1

2911- 2937 (Douglas Creek) T.D. 2937'.
Tool open 4 minutes. Had a fair blow. Shut
tool in for 30 minutes. Reopened tool for 90
minute flow period. Had a fair steady blow
throughout flow period. Shut tool in for 70
minute final shut in pressure.

Recovered 90' water cut mud with a scum of oil;
90' mud cut water slightly gas cut and 910' wa-
ter slightly gas cut and salty with a faint
odor of ammonia.

I.S.I.P. 30 minutes	-----	1420#
F.S.I.P. 70 minutes	-----	1420#
I.F.P.	-----	142#
F.F.P.	-----	600#
I.H.H.	-----	1600#
B.H.T.	-----	94°F

D.S.T. #2

4860.5- 4875 (4856.5- 4871.5 Log measurements)
T.D. 4875'.

Tool open 4 minutes with a good blow. Shut
tool in for 30 minutes. Reopened tool for 75
minute flow period. Had a good steady blow for
25 minutes that decreases to a fair blow for re-
mainder of open period. Had gas to the surface
in 30 minutes. Too small to measure. Shut tool
in for 60 minute final shut in pressure.

Recovered 230' gas cut, black oil and 270' mud
and gas cut, black oil.

I.S.I.P. 30 minutes	-----	1581#
F.S.I.P. 60 minutes	-----	971#
I.F.P.	-----	95#
F.F.P.	-----	168#
I.H.H.	-----	2497#
F.H.H.	-----	2470#
B.H.T.	-----	134°F

D.S.T. #3

5436- 5460 (Black shale facies) T.D. 5460'.
Tool open 4 minutes. Had a very weak blow.
Shut tool in for 45 minutes. Reopened tool for
45 minutes. Had a very weak blow for 15 minutes
and blow died. Waited 15 minutes and reset
packer. Had a very weak blow for 15 minutes
and died. Shut tool in for 60 minute final shut
in pressure.

Recovered 90' drilling mud with a trace of oil
at top.

I.S.I.P. 45 minutes	-----	194#
F.S.I.P. 60 minutes	-----	142#
I.F.P.	-----	19#
F.F.P.	-----	62#
I.H.H.	-----	2799#
F.H.H.	-----	2760#
B.H.T.	-----	142°F

CORE ANALYSIS RESULTS

DEPTH Feet	PERMEABILITY Horizontal	POROSITY Per Cent	OIL Per Cent	WATER Per Cent
5411 ¹ / ₂	.35	9.8	30	25
5412 ¹ / ₂	.25	9.0	22	28
5417 ¹ / ₂	.30	8.2	25	25
5419 ¹ / ₂	.12	7.9	16	29
5430 ¹ / ₂	.00	5.6	19	38
5438 ¹ / ₂	.40	8.4	35	27
5439 ¹ / ₂	.12	7.8	26	36
5440 ¹ / ₂	.15	7.1	32	28
5441 ¹ / ₂	.00	6.5	32	32
5442 ¹ / ₂	1.00	10.0	29	28
5443 ¹ / ₂	1.75	10.0	29	28
5444 ¹ / ₂	1.00	8.8	29	23
5445 ¹ / ₂	1.10	10.7	30	27
5446 ¹ / ₂	0.00	6.9	28	30
5447 ¹ / ₂	.64	8.1	27	26
5448 ¹ / ₂	1.50	9.4	32	29
5449 ¹ / ₂	0.00	6.3	20	29
5450 ¹ / ₂	.85	8.9	36	28
5451 ¹ / ₂	.85	9.3	28	27
5452 ¹ / ₂	1.25	10.6	21	24
5453 ¹ / ₂	.75	9.3	30	22
5454 ¹ / ₂	1.50	11.2	25	24
5455 ¹ / ₂	1.36	10.5	26	24
5456 ¹ / ₂	1.00	10.8	27	21
5457 ¹ / ₂	.90	10.3	28	24
5458 ¹ / ₂	1.30	9.8	38	28

CORING LOG

<u>INTERVAL</u>	<u>TIME</u>	<u>MINUTES PER FOOT</u>
5411	8:53 A.M.	--
5412	9:00 A.M.	7
5413	9:08 A.M.	8
5414	9:18 A.M.	10
5415	9:25 A.M.	7
5416	9:38 A.M.	13
5417	9:45 A.M.	7
5418	9:52 A.M.	7
5419	9:57 A.M.	5
5420	10:04 A.M.	7
5421	10:13 A.M.	9
5422	10:27 A.M.	14
5423	10:40 A.M.	13
5424	10:58 A.M.	18
5425	11:10 A.M.	12
5426	11:25 A.M.	15
5427	11:38 A.M.	13
5428	11:48 A.M.	10
5429	11:56 A.M.	8
5430	12:16 P.M.	6
5431	12:21 P.M.	5
5432	12:30 P.M.	9
5433	12:38 P.M.	8
5434	12:45 P.M.	7
5435	12:57 P.M.	12
5436	1:09 P.M.	12
5437	1:15 P.M.	6
5438	1:23 P.M.	8
5439	1:28 P.M.	5
5440	1:35 P.M.	7
5441	1:41 P.M.	6
5442	1:47 P.M.	6
5443	1:53 P.M.	6
5444	2:00 P.M.	7
5445	2:06 P.M.	6
5446	2:12 P.M.	6
5447	2:17 P.M.	5
5448	2:23 P.M.	6
5449	2:28 P.M.	5
5450	2:34 P.M.	6
5451	2:41 P.M.	7
5452	2:46 P.M.	5
5453	2:54 P.M.	8
5454	2:59 P.M.	5
5455	3:04 P.M.	5
5456	3:10 P.M.	6
5457	3:15 P.M.	5
5458	3:24 P.M.	8
5459	3:26 P.M.	13
5460	3:45 P.M.	9
5461		

TOTAL TIME 6 HOURS & 52 MINUTES

AVERAGE TIME PER FOOT - 8.4 MINUTES

DRILLING TIME 10' INTERVALS

403- 500	11	10	20	25	18	12	15	12	12	15
500- 600	13	15	25	12	14	10	15	15	12	11
600- 700	15	12	10	12	10	11	13	18	20	20
700- 800	20	25	23	17	15	20	15	10	22	22
800- 900	12	11	13	20	18	15	10	17	15	13
900-1000	12	17	15	15	10	15	10	15	20	15
1000-1100	20	15	20	15	15	10	10	15	15	10
1100-1200	10	10	20	20	15	15	20	15	15	15
1200-1300	20	20	10	10	15	10	16	15	15	20
1300-1400	20	10	10	10	10	10	10	13	10	10
1400-1500	10	10	10	10	10	15	15	20	18	20
1500-1600	25	25	25	30	25	40	30	35	35	30
1600-1700	20	18	30	20	20	25	10	10	10	10
1700-1800	10	10	10	10	10	10	10	12	10	12
1800-1900	10	20	10	10	10	10	10	10	10	10
1900-2000	10	10	10	10	10	10	10	10	10	10
2000-2100	10	15	15	10	15	18	20	25	25	13
2100-2200	10	10	10	15	20	18	25	25	28	30
2200-2300	35	25	25	22	20	25	22	23	20	25
2300-2400	25	25	20	35	35	60	45	20	18	15
2400-2500	22	20	30	40	45	24	25	30	25	35
2500-2600	30	30	32	28	40	30	30	25	25	30
2600-2700	30	25	25	25	25	25	25	25	28	25
2700-2800	35	35	55	35	30	30	25	25	25	15
2800-2900	15	25	35	40	45	45	25	20	45	50
2900-3000	40	20	35	60	40	40	35	40	30	25
3000-3100	25	25	20	45	45	38	45	60	55	55

3100-3200	60	45	40	40	40	48	30	30	40	40
3200-3300	35	45	50	50	60	35	35	38	35	43
3300-3400	45	55	50	50	55	30	20	20	22	30
3400-3500	40	29	37	55	30	26	35	35	55	45
3500-3600	45	45	50	40	36	49	45	35	35	47
3600-3700	39	36	38	39	33	44	41	39	44	40
3700-3800	45	39	51	54	46	33	33	45	38	63
3800-3900	52	49	45	35	50	23	55	68	80	55
3900-4000	54	57	60	62	65	40	45	52	55	50
4000-4100	58	43	40	50	45	40	50	65	45	65
4100-4200	40	55	30	30	38	70	44	63	48	43
4200-4300	72	45	25	33	37	27	55	52	50	65
4300-4400	60	37	45	58	55	68	52	58	62	51
4400-4500	75	62	65	60	50	50	63	40	35	37
4500-4600	35	45	53	45	63	55	42	47	47	35
4600-4700	45	37	33	50	50	57	41	42	43	45
4700-4800	52	54	56	75	76	37	48	40	52	60
4800-4900	50	65	65	80	49	40	35	48	50	50
4900-5000	42	24	45	48	48	50	50	45	47	55
5000-5100	40	40	42	45	58	55	70	67	72	65
5100-5200	68	70	43	30	25	30	29	34	35	30
5200-5300	30	20	18	28	42	32	35	28	20	23
5300-5400	30	37	45	40	46	34	35	40	50	50
5400-5500	38	c	c	c	c	c	35	30	40	35
5500-5600	53	47	50	45	55	60	50	65	65	65
5600-5700	70	48	40	42	35	30	43	46	60	65
5700-5800	62	40	58	60	30	67	58	38	50	34
5800-5900	35	47	45	43	45	37	42	53	77	72
5900-6000	40	35	52	50	51	50	45	55	57	57

CORE DESCRIPTION

CORE #1 - 5411- 5460' - CUT 49' - RECOVERED 50'
Core cut in Black Shale Facies of lower Green River formation.

5411	-5413	Sandstone buff, very fine, low porosity, silty, tite good odor, light fluorescence.
5413	-5415	Sandstone buff, very fine low porosity, tite poor odor, fair fluorescence, staining on partings.
5415	-5416	Siltstone light gray, very shaly.
5416	-5417	Very fine light gray sandstone to siltstone, hard, shaly.
5417	-5420	Sandstone buff, very fine low porosity, tite silty, poor odor, light yellow fluorescence.
5420	-5429.5	Shale black to gray black with streaks of ostracodol brown marlstone. Very limy, spotty light yellow fluorescence.
5429.5-5430.5		Sandstone fine to medium, silicious, very hard, spotty to speckled light yellow fluorescence.
5430.5-5432		Sandstone fine to medium light gray hard, tite low porosity slight odor, light stain, light yellow fluorescence.
5432	-5434.5	Siltstone, gray to dark gray.
5434.5-5436		Siltstone to very fine light gray sandstone hard, tite.
5436	-5438	Sandstone very fine to siltstone light gray hard, slight odor, low porosity.
5438	-5439	Sandstone very fine low to poor porosity, spotty stain, dull fluorescence.
5439	-5440	Sandstone very fine slightly friable, poor to fair porosity, dull fluorescence, fair odor, silty very low permeability, light stain.
5440	-5441	Sandstone as above, scattered carbonaceous partings, bleeding oil, dull fluorescence.
5441	-5442	Sandstone as above, fair to good odor.
5442	-5443	Sandstone as above.
5443	-5444	Sandstone as above. Live oil on fractures.
5444	-5445	Sandstone as above.
5445	-5446	Sandstone as above, spotty bleeding.
5446	-5447	Sandstone as above.
5447	-5448	Sandstone as above, good odor.
5448	-5449	Sandstone as above, good odor.
5449	-5450	Sandstone as above.
5450	-5451	Sandstone as above. Bleeding oil on fractures.
5451	-5452.5	Sandstone as above, bleeding as above.
5452.5-5453.5		Sandstone as above with scattered shale lams. Low porosity.
5453.5-5454		Sandstone as above, poor porosity, saturated.
5454	-5455	Sandstone fine grained, saturated fluorescence as above, fair porosity, fair to good odor.

5455	-5456	Sandstone as above, bleeding on partings. Low permeability, good odor, fair to good fluorescence.
5456	-5457	Sandstone as above with low permeability.
5457	-5458	Sandstone as above becoming silty with scattered light gray shale pellets.
5458	-5459	Sandstone as above.
5459	-5461	Shale gray to black with siltstone lams.

SAMPLE DESCRIPTIONS

<u>DEPTH</u>	<u>DESCRIPTIONS</u>
400- 430	Interbedded light gray and red to brown silty shales and claystones with thin slightly calcareous very fine light gray silty sandstone stringers.
430- 460	As above. Predominantly red to brown to dull red silty shale.
460- 490	As above. Trace of muscovite mica.
490- 520	As above. Sandstone stringers as above with mica, hard platy.
520- 550	As above.
550- 580	As above with slight increase in sandstone stringers mainly light gray shales and claystones with sandstone as above.
580- 610	As above with streak dark brown marlstone saturated, slightly cut, light to yellow fluorescence.
610- 640	Sandstone light gray with white and green to gray streaks spotty saturated, low porosity clay filled micaceous with shales as above, streak tan dense limestone thin.
640- 670	As above with shales multicolor as above with thin limestone.
670- 700	As above with increase in shales.
700- 730	Shales as above with sandstone stringers as above trace limestone.
730- 760	As above with streaks of white clayfilled platy sandstone with black micaceous flakes. Low porosity.
760- 790	Sandstone as above with brown to red and mottled gray shale.
790- 820	TRIP BIT #2 at 800!. Predominantly shale as above.
820- 850	Shales as above with streaks of white to light gray hard sandstone as above, traces of hard rose quartzitic sandstone, platy.
850- 880	Shale as above with sandstone stringers as above.
880- 910	As above with increase in sandstone as above, white to buff micaceous and clay filled.
910- 940	As above with streak dense buff to rose limestone.
940- 970	Predominantly white sandstone as above with shales as above.
970-1000	Predominantly shale with sandstone as above. (COMMENCED CARRYING METHANE GAS IN MUD SYSTEM).
1000-1030	As above. Stringers of dense buff limestone.
1030-1060	As above, shales and sandstone are becoming calcareous.
1060-1090	As above.
1090-1120	As above.
1120-1150	As above with streaks of dark brown shales.
1150-1180	As above with sandstone as above clay filled, calcareous, porous.
1180-1210	As above.

1210-1220 As above. Starting 10' Samples.
1220-1230 Shales as above with sandstone white very fine to fine with fine to medium streaks, poorly sorted glauconitic and micaceous, calcareous.
1230-1240 Sandstone as above interbedded with shales as above.
1240-1250 Sandstone as above, predominantly fine to medium.
1250-1260 Shales as above with sandstone as above becoming finer.
1260-1270 Predominantly sandstone fine with fine to medium as above..
1270-1280 Predominantly light gray to pale green to gray siltstone to claystone pyritic, slightly calcareous.

ESTIMATED TOP OF CLAYSTONE AT 1263'.

1280-1290 Claystone to siltstone as above with streak dolomite, cream to buff, micro-crystalline hard and fragmental.
1290-1300 Streak limestone as above, light gray very fine sandstone to siltstone with thin streaks of hard very fine to fine slightly glauconitic micaceous and gritty sandstone.
1300-1310 TRIP BIT #3 at 1309'.
1310-1320 Hard very fine to fine sandstone clay filled slightly glauconitic with white siltstone and varicolored shale as above.
1320-1330 As above with thin streak of dense tan limestone as above.
1330-1340 White to light gray siltstone to claystone with very fine to fine hard sandstone as above, trace buff to cream limestone.
1340-1350 As above.
1350-1360 As above.
1360-1370 Sandstone fine to gritty slightly micaceous and glauconitic and shale red to brown and green, traces of buff to tan finely crystalline limestone.
1370-1380 Shale and sandstone as above with slight increase in limestone as above.
1380-1390 As above with streak limestone buff to cream finely crystalline dull yellow mineral fluorescence.

ESTIMATED TOP OF GREEN RIVER AT 1363'.

1390-1400 Limestone as above slightly fossiliferous with streaks of tan to gray marlstone and thin streaks of white sandstone as above, slightly micaceous, slightly glauconitic and gritty with trace of oil saturation.
1400-1410 As above with increase in marlstone and some brown shales.
1410-1420 Sandstone white to buff and light gray as above with intermittent streaks of marlstone and shale as above.
1420-1430 As above with thin streak of buff limestone as above.

1430-1440 As above with slight increase in limestone as above.
 1440-1450 As above.
 1450-1460 As above.
 1460-1470 As above with less limestone as above slight increase in sandstone.
 1470-1480 As above.
 1480-1490 As above.
 1490-1500 Sandstone as above with marlstones as above, sandstones are gritty.
 1500-1510 As above with increase in marlstones.
 1510-1520 As above.
 1520-1530 As above with streak of buff limestone as above.
 1530-1540 As above with trace of residual oil stain in sandstone and less limestone as above.
 1540-1550 As above with streak of limestone as above.
 1550-1560 As above with slight increase in limestone as above.
 1560-1570 As above with slightly less limestone as above, less sandstone.
 1570-1580 As above with slight increase in limestone buff and tan to brown marlstone, very limey with fluorescence, less sandstone.
 1580-1590 As above with increase in limestone and marlstone.
 1590-1600 Predominantly buff to brown lime and marlstone with some sandstone as above.
 1600-1610 As above with residual stain in hard sandstone.
 1610-1620 As above.
 1620-1630 As above with streak marlstone red to brown to dark brown.
 1630-1640 Marlstone dark brown to red to brown, slightly micaceous, residual oil stain, dull yellow fluorescence.

ESTIMATED TOP OF PARACHUTE CREEK AT 1620' - 70 UNITS OF GAS.

1640-1650 Marlstone as above, dull yellow fluorescence.
 1650-1660 As above with streak very fine to fine poorly sorted white clay filled sandstone, glauconitic, micaceous and calcareous associated white to light gray siltstone to claystone. Dull yellow fluorescence as above.
 1660-1670 As above with increase in sandstone and siltstone, streaks of conglomeratic siliceous sandstone with grains fused together, less marlstone.

TRIP BIT #4 at 1670'.

1670-1680 Predominantly cavings.
 1680-1690 Shales red to brown to gray micaceous with tan marlstone and tite gritty sandstone as above, white to buff siltstone as above.
 1690-1700 Shale as above with increase in tan marlstone, some sandstone as above, increase in siltstone non-calcareous.
 1700-1710 Tan to brown shale and marlstone, gray to green shale.

1710-1720	As above with scattered calcareous veins and thin silty, fine sandstone buff to white to gritty, poorly sorted, hard.
1720-1730	As above with infrequent signs of asphaltic stain, less sandstone as above, fluorescence as above continued.
1730-1740	As above, mainly tan shale and marlstone with sandstone as above.
1740-1750	As above with scattered calcareous veins as above.
1750-1760	Tan to brown veined shale and marlstone as above, dull fluorescence, traces of gray shale and white siltstone.
1760-1770	As above.
1770-1780	As above.
1780-1790	As above with thin streak gritty sandstone as above clay filled poorly sorted, tite, silty.
1790-1800	As above with less sandstone.
1800-1810	As above with slight increase in calcareous veins, trace of calcarinite.
1810-1820	As above with streak of gritty gray to white sandstone, as above streak of medium gray hard shale with insect wings.
1820-1830	Tan to brown shale and marlstone as above, scattered veins and thin streaks of gritty poorly sorted sandstone as above, some gray shale as above.
1830-1840	As above with sandstone interbedded with shales.
1840-1850	Shales as above with streaks of white to light gray silty shale and siltstone with thin stringers of gritty sandstone as above. (Possibly cavings due to tite hole when connections are made).
1850-1860	As above (Jetted pits).
1860-1870	As above, cement cavings in samples. Gritty sandstone and white to gray siltstone as above.
1870-1880	As above with gritty sandstone as above. No visible stain in sand, no cut, no fluorescence.
1880-1890	As above with sandstone as above.
1890-1900	As above.
1900-1910	As above with sandstone as above. Very fine to fine silty and clay filled.
1910-1920	As above with sandstone very fine micaceous, calcareous, no shows.
1920-1930	As above. (Although some gas background is still being carried, there are no distinctive gas kicks for these sands). Streaks of gray to green shale.
1930-1940	Sandstone with shales as above with streaks gray to green to bright green mottled shale associated with sandstone.
1940-1950	Shales multi-colored to predominantly tan with thin finely crystalline buff limestone and some sandstone as above.
1950-1960	Shale as above with thin streaks of white gritty sandstone, glauconitic.
1960-1970	As above, traces of buff to cream limestone.
1970-1980	Shales predominantly tan and gray to green with stringers of sandstone as above.

1980-1990 Shales as above with slight increase in stringers of sandstone, as above hard platy, gritty, low porosity.

1990-2000 Predominantly tan shales as above with some gray to green.

2000-2010 As above with thin white gritty sandstone, silty trace carbonaceous material. (Asphalt on sandstone partings).

2010-2020 As above with slight increase in sandstone. (Note :: Taking 20 - 25 minutes for a connection due to tite hole. Sandstone and shale are caving from up the hole).

2020-2030 As above.

2030-2040 As above with traces of residual stain in silty sandstone.

2040-2050 As above, predominantly tan to buff with brown shale and marlstone with gray to green shale (questionable cavings) and sandstone (questionable cavings as above).

2050-2060 As above.

2060-2070 As above (dumped pits).

2070-2080 As above with cavings.

2080-2090 Shales as above.

TRIP BIT #5 at 2086'.

2090-2100 As above with increase in sandstone (questionable cavings).

2100-2110 As above with less sandstone.

2110-2120 As above.

2120-2130 As above.

2130-2140 As above.

2140-2150 As above with stringers of sandstone as above.. (26 units of gas at 2135 - 2138).

2150-2160 As above with increase in darker marlstones, traces of black tar, no fluorescence, streaked cut. Change occurred at 2145' plus or minus.

2160-2170 Marlstone brown to tan and dark brown to gray, trace of tar.

2170-2180 As above.

2180-2190 As above.

2190-2200 As above.

2200-2210 Tan to brown shales with marlstone, traces of tar.

TRIP BIT #6 at 2210'.

2210-2220 As above.

2220-2230 As above.

2230-2240 No sample.

2240-2250 As above with traces of tar as above and calcareous veins.

2250-2260 As above.

2260-2270 Tan to brown with dark brown shale and marlstone as above with streaks of calcite veining.

2270-2280 As above.

2280-2290 As above.

2290-2300 As above.

2300-2310 (Commenced mudding up, had trona water, foamed mud. Apparently hit a thin trona bed at approximately 1500' plus or minus in Green River formation. Shales as above).

2310-2320 As above.

2320-2330 As above.

2330-2340 No sample.

2340-2350 As above with trace of asphaltic stain.

2350-2360 As above.

2360-2370 As above.

TRIP BIT #7 at 2362'.

2370-2380 As above.

2380-2390 As above.

2390-2400 As above.

2400-2410 As above with mainly dark brown shale with marlstone, slight increase in calcite veining and asphalt streaks.

2410-2420 Dark brown as above.

2420-2430 As above.

2430-2440 As above.

2440-2450 As above.

2450-2460 As above.

2460-2470 As above.

2470-2480 As above.

2480-2490 As above.

2490-2500 As above.

2500-2510 As above with questionable streak of gray to green silty shale.

2510-2520 Brown shale as above with asphaltic stain.

2520-2530 As above.

2530-2540 As above with streak of gray to green sandy shale.

2540-2550 As above with streak of gray to green shale as above.

2550-2560 As above with streak of gray and gray to green shale as above, thin stringer of silty very fine white sandstone, questionable calcarinite.

2560-2570 As above with trace of gray shales as above, asphaltic tar.

2570-2580 As above with thin streaks of gray shales as above, trace of dark gray shale, asphaltic material.

2580-2590 As above with gray to green shales and asphalt or tar, traces of white calcarinite.

2590-2600 As above with marlstone becoming more limey, streaks of argillaceous buff finely crystalline limestone.

2600-2610 As above with thin streaks of gray to black shale.

2610-2620 As above with increase in white calcarinite veins.

2620-2630 Predominantly marlstone with thin argillaceous finely crystalline limestone streaks and thin shales as above, trace asphalt.

2630-2640 Predominantly marlstone with increase in limestone as above. A minute "wavy" striated appearance in the marlstone, asphaltic.

2640-2650 Predominantly marlstone, dark brown petroliferous,

micaceous and streaks of dark brown, limey shale and dark gray shales, trace of white to light gray sandstone.

2650-2660 As above. (Twisted off 16 drill collars and one stand, fished out).

2660-2670 As above with trace brown finely crystalline argillaceous limestone, traces of asphalt.

2670-2680 As above with streaks of very finely striated buff marlstone, limey.

2680-2690 As above with trace of pyrite in buff limestone.

2690-2700 As above with veins of questionable selenite, trace of pyrite, thin dark brown limestone as above. Visible stain in marlstone.

2700-2710 As above.

2710-2720 As above. (Note: Lost 80 barrels of mud from 2707' - 2737'. Fractured zone giving up gas with peaks of 20 to 25 units).

2720-2730 Marlstone and shale as above with streaks of asphaltic stain.

2730-2740 As above with trace of white to light gray, fine, gritty, poorly sorted sandstone, conglomeratic.

2740-2750 As above with trace of sandstone as above, questionable cavings.

2750-2760 As above.

2760-2770 As above.

2770-2780 As above.

2780-2790 As above with streak of buff to light gray, hard, very fine, silty sandstone, slightly calcareous streaks with greasy stain, buff shales, soft and cruddy, somewhat bentonitic (near an unconformity). SANDSTONE AT 2775' - 2780'.

2790-2800 Marlstone as above with traces of light gray to green and red shales, slightly bentonitic and traces of sandstone, very fine as above and fine, slightly gritty and conglomeratic sandstone, clay filled. (Sandstone at 2788' - 2793' - 150 units).

2800-2810 Slight increase in sandstone as above, very fine, hard, low porosity, spotted residual stain with slightly cut and light yellow fluorescence. (Sandstone at 2805' - 2811, 2814' - 2828'). Overall, sandstone is dense and limey streaks of finely crystalline argillaceous limestone with stain.

2810-2820 Shales and finely crystalline argillaceous with stain as above and sandstone buff with light gray, very hard, low porosity, spotty stain.

2820-2830 As above, limestone appears more sandy and streaks of hard buff sandstone as above with streaks of stain.

2830-2840 As above with some sandstone as above. (Gas kicks from sandstone above are working out).

2840-2850 As above.

2850-2860 Predominantly hard, brown shales with limey streaks and streaks of buff to light gray, very fine, hard sandstone.

TRIP BIT #10 at 2850'.

2860-2870 As above with streak light to medium gray hard silty shale.

2870-2880 Gray shales as above with sandstone hard, white to light gray, very fine with fine, hard, slightly micaceous with streaks of stain in fine sandstone. Overall, low porosity, "no gas kicks". SANDSTONE AT 2856' - 2883'.

2880-2890 Hard sandstone as above with streaks of stain in fine sandstone and light to medium gray shales as above and streaks of brown, hard, finely crystalline argillaceous limestone.

2890-2900 Hard sandstone as above, silty, slightly micaceous, interbedded with shales as above, stain as above, slightly increasing.

2900-2910 Brown shales with limestone as above with streaks of hard buff very fine to fine sandstone, spotty stain in both shales and sandstone.

2910-2920 Shales light to medium gray, hard and silty with sandstone white to light gray, hard, fine to very fine with streaks of fine to medium hard sandstone, with poor porosity and spotty saturation, slightly micaceous, spotty stain in very fine to fine sandstone.

2920-2930 Sandstone white, predominantly medium grain, sub-angular, somewhat clay filled, spotty oil saturation. Fair cut and fluorescence, fair porosity, slightly friable to friable in part, slightly micaceous and slightly calcareous. (40 - 60 units of gas). SANDSTONE AT 2909' - 2928'.

T.D.-2937 CIRCULATING SAMPLE 1 hour
Sandstone as above with spotty to solid stain, friable and shale dark gray and gray to brown, limey. Streak dense, hard, very fine sandstone.

DST #1 2911- 2937'

2940-2950 Hard brown gray shales with silty sandstone interbedded and streak sandstone, medium gritty, conglomeratic, micaceous, fair porosity, streaks of black oil stain, questionable cavings from trip.

2950-2960 Brownish gray shale with siltstone and sandstone, tan to gray, very fine, hard silty sandstone, slightly micaceous.

2960-2970 As above with trace of tan to gray micro-crystalline limestone, trace dark brown, hard shale.

2970-2980 As above with trace of pyrite in hard limestone.

2980-2990 As above with streak of hard, fine sandstone, buff silty, poorly sorted, scattered black residual stain, very limey, no fluorescence, faint, no cut. (33 units of gas). SANDSTONE AT 2976' - 2981'.

2990-3000 No sample.

3000-3010 As above, dark asphaltic stain along seams and partings, very little hard sandstone as above.

3010-3020 As above with limey sand streaks as above, trace of asphaltic stain.

3020-3030 Dark brown shale with limestone as above with

tan to gray streaks, some limey tan to gray sandstone as above.

3030-3040 As above, striations in tan to brown limestone, trace of pyrite.

3040-3050 As above with pyrite streaks in limestone, streak of buff also limestone with fragments slightly pyritic and slightly sandy.

3050-3060 As above. As above with streak of light gray, hard shale with silty, light gray pyrite, very fine, hard sandstone stringers.

3060-3070 Light gray shales with hard sandstone as above with scattered pyrite and buff, hard limey sandstone as above with some brown shale as above.

3070-3080 As above, light gray sandstone with shale and buff sandstone with shale.

3080-3090 Predominantly light to medium gray shale with streaks of buff to light gray, hard sandstone as above with trace of asphaltic stain.

3090-3100 As above.

3100-3110 As above.

3110-3120 As above.

TRIP BIT #12 at 3112'.

3120-3130 Buff to light gray shales and sandstone as above, very hard.

3130-3140 As above.

3140-3150 Brown to dark brown shales with limey streaks with thin streaks of buff sandstone, very fine, hard to slightly friable, slightly micaceous.

3150-3160 No sample.

3160-3170 Light medium gray, hard, silty calcareous sandstone with shales light to medium gray, streak of buff sandstone with brown shale as above.

3170-3180 As above with increase in buff sandstone and brown shale, trace of stain in buff sandstone..

3180-3190 Predominantly brown shales, limey and sandy with streaks of buff sandstone, hard, very fine, limey.

3190-3200 As above with increase in sandstone as above.

3200-3210 Sandstone with shale as above, thin streak of brown limestone, platy with stain along partings, streak of dark greenish to gray sandy, hard shale.

3210-3220 Brown shale as above, mottled with green shale as above with streak of light gray, fine, hard limey sandstone.

3220-3230 As above with very little light gray sandstone.

3230-3240 As above with streak of buff to tan to brown dense argillaceous to finely crystalline limestone, slightly pyritic to pyritic, platy.

3240-3250 As above with increase in limestone, trace of residual stain on partings.

TRIP BIT #13 at 3249'.

3250-3260 No sample.

- 3260-3270 Brown shale with limestone as above, trace of white to light gray, very fine to fine sandstone, slightly micaceous and calcareous, slightly clay filled.
- 3270-3280 Brown shale with limestone as above with streak of light gray, very fine, hard sandstone.
- 3280-3290 As above with trace of white to light gray sandstone as above with clay filling.
- 3290-3300 Medium gray shale, hard, sandy with streaks of very hard siliceous very fine to fine, poorly sorted sandstone, clay filled in partings.
- 3300-3310 Brown shale as above, mottled with dark green and buff brown argillaceous limestone as above.
- 3310-3320 Medium gray sandstone and shale as above interbedded with the brown shales as above.
- 3320-3330 As above, predominantly brown shale, streaks of brown to gray, hard, very fine to fine silty slightly micaceous sandstone.
- 3330-3340 Predominantly brown shale with limestone as above.
- 3340-3350 As above with streak of gray shales as above.
- 3350-3360 Brown shales as above with buff to cream limestone, fragmental to marly with scattered pinpoint residual stain in fossiliferous (minute ostracods) streaks.
- 3360-3370 As above with scattered stain in limestone as above, trace of brown to gray, hard, very fine micaceous sandstone, trace of brown to gray marly shale.
- 3370-3380 As above with thin stringers of hard buff to light gray sandstone associated with limestone, limestone slightly chalky.
- 3380-3390 As above.
- 3390-3400 As above.
- 3400-3410 As above.
- 3410-3420 As above with buff to cream, light gray dense to micro-crystalline limestone.
- 3420-3430 As above with light gray dense limestone as above with medium gray hard shale.
- 3430-3440 As above.
- TRIP BIT #15 at 3439'.
- 3440-3450 Brown shales and marlstones with gray limestone and shales as above.
- 3450-3460 Predominantly gray shale with limey streaks as above.
- 3460-3470 As above with streaks of fine buff saturated sandstone hard, low to poor porosity, slightly micaceous. SANDSTONE AT 3452' - 3456'.
- 3470-3480 Shales as above with streaks of buff to cream argillaceous limestone, streak of sandstone as above becoming wet.
- 3480-3490 Predominantly light to medium gray, hard shale with limey streaks, hard and sandy.
- 3490-3500 As above with trace of sandstone with stain as above.
- 3500-3510 Brown to tan to gray limestone and shales, hard, sandy.
- 3510-3520 As above.
- 3520-3530 Predominantly brown to brownish gray, shales with limey streaks, micaceous and sandy.

3530-3540 As above with streak of tan to gray, hard micro-crystalline to finely crystalline argillaceous limestone.

3540-3550 As above with limestone streaks as above becoming sandy. (Sandy limestone at 3537 - 3542').

3550-3560 Brown to dark brown limey shales as above with gray streaks with hard, tan to gray limestone.

3560-3570 As above.

3570-3580 As above with streak of buff to tan ostracodol limestone. (Limestone at 3571- 3576').

3580-3590 As above with increase in limestone, trace of white chert.

3590-3600 As above, shale with limestone, no visible ostracods.

3600-3610 As above with streak of hard, light gray, very fine sandstone, slightly calcareous.
SANDSTONE AT 3604'.

TRIP BIT #16 at 3606'.

3610-3620 Predominantly brown with gray shale. Trip sample.

3620-3630 Brown shale as above with thin beds of buff to tan finely crystalline argillaceous limestone with infrequent ostracodol streaks with disseminated oil stain.

3630-3640 As above with thin streaks of medium gray sandy shale.

3640-3650 Brown to dark brown shales as above with increase in limestone, as above streak of ostracodol limestone with saturation and cut. (Limestone at 3641'-3646' had 42 units of gas.

3650-3660 As above with less ostracodol limestone, as above very slightly cut, shales slightly mottled with gray to green.

3660-3670 As above with limestone as above argillaceous, mottled.

3670-3680 As above, with limestone as above with ostracodol streaks with stain. (23 units of gas at 3665- 3668').

3680-3690 As above with ostracodol limestone streaks as above. (25 units of gas at 3676- 3680').

3690-3700 Shales and limestone as above with ostracodol limestone streaks. (12 units of gas at 3693-3695').

3700-3710 As above with trace of ostracodol limestone, hard, well cemented.

3710-3720 Medium gray to gray green silty shale with streak of white to light gray, very fine silty, hard sandstone, silicious, slightly micaceous.

3720-3730 White to light gray, very fine to fine, hard, slightly micaceous sandstone and light gray to green shales, hard, limey.
SANDSTONE AT 3712'-3718'.

3730-3740 Hard sandstone as above, silty, calcareous and shales as above interbedded.

3740-3750 Sandstone as above with shale as above, sand very hard in partings.

3750-3760 As above with carbonaceous partings, silty.

3760-3770 Sandstone as above becoming cleaner, hard, low to

- poor porosity. No cut or fluorescence. (18 units gas kick).
 SANDSTONE AT 3757'- 3766'.
 3770-3780 Sandstone white to light gray, very fine to fine, hard clay filled, calcareous, local very fine disseminated residual stain, low to poor porosity, thin ostracodol limestone lams. (40 units of gas).
 SANDSTONE AT 3779'- 3783'.
 3780-3790 Sandstone as above becoming harder and silty, scattered, thin, medium gray shale with siltstone lams. Fair with dull fluorescence and cut with limey and clay filled streaks. (85 units of gas).
 SANDSTONE AT 3783'- 3786'.
 3790-3800 Sandstone as above with thin buff ostracodol limestone streaks, minute black residual type stain in sandstone, gritty streaks of fine to medium sub-rounded sandstone with poor to fair porosity with low permeability.
- TRIP BIT #17 at 3798' (Carrying gas).
- 3800-3810 Sandstone as above with limestone buff to cream finely crystalline with ostracodol streaks and dark brown to brown, hard shale.
 3810-3820 Limestone and shales as above with some sandstone as above with gray shale lams, sandstone silty, poorly developed.
 3820-3830 As above with sandstone as above with residual type stain.
 3830-3840 Light medium gray shales with white to light gray very fine, hard, sandstone, interbedded lams and sandstone, light gray, fine with fine to medium streak with stain as above, slightly cut in both sandstone and limestone.
 3840-3850 Brown shale with gray as above and limestones as above, streak of sandstone associated with limestone, fine, friable, fair porosity, silty stain as above. SANDSTONE AT 3835'- 3840 with 30 units of gas.
 3850-3860 Sandstone white to light gray, fine with dense streaks and infrequent streaks of fine to medium clay filled sandstone, poor porosity, limey streaks with ostracods, infrequent spotty residual stain, "no gas kick", mixing mud to get weight up above 100 pounds.
 SANDSTONE AT 3851'- 3861'.
 3860-3870 Light to medium gray, hard, fine sandstone with shale lams, some brown shale and buff limestone as above.
 3870-3880 As above with streak fine to medium, poorly sorted, gritty sandstone, white, clay filled with streaks of residual stain.
 3880-3890 Predominantly hard, gray, very fine sandstone and silty, light gray shale.
 3890-3900 As above with streak of buff limestone with hard ostracods and oolitic streaks, limestone crypto-crystalline in partings with trace of residual stain.

3900-3910 Brown and gray shales with gray to green streaks with hard sandstone as above, some limestone as above.
 3910-3920 As above with streak of dense, tan micro-crystalline limestone, (putting diesel fuel into mud).
 3920-3930 Gray shale with brown as above with tan, dense, limestone, dense fine to very fine, hard sandstone, calcareous, light gray.
 3930-3940 Gray shale, hard, silty with fine, hard, sandstone as above.
 3940-3950 Gray shales with hard very fine slightly micaceous sandstone and hard light to medium gray siltstone streaks.

TRIP BIT #18 at 3948'.

3950-3960 As above with streak of dense, earthy to fragmental, buff limestone.
 3960-3970 Shale as above with hard sandstone and siltstone streaks. Trace of asphaltic stain on infrequent partings, streak of tan to gray, hard sandstone very fine.
 SANDSTONE AT 3955' - 3960.
 3970-3980 Tan to gray with light gray, hard dense sandstone, slightly micaceous, stain on infrequent partings, traces of ostracodol limestone with sandstone and shales as above, trace of green shaley siltstone.
 3980-3990 Shales as above with sandstone stringers streak of buff limestone as above, predominantly shale, medium, gray hard.
 3990-4000 Streak to buff to brown ostracodol, earthy limestone with shale and sandstone as above. Limestone dense with trace of stain. (Limestone at 3983'-3985').
 4000-4010 Ostracodol brown limestone with brown shale as above, sandy streaks and thin streaks of buff, hard limestone, thin lams of hard buff sandstone with shale.
 Limestone AT 3996'-3999'. SANDSTONE AT 4003'.
 4010-4020 Brown shale with limestone as above, trace of oolite and streaks of light to medium gray shale with hard sandstone stringers.
 4020-4030 Predominantly light medium gray shale with sandstone as above with some brown shale and limestone as above, trace of stain.
 4030-4040 Sandstone white to light gray, very hard, slightly micaceous and gray shale as above.
 SANDSTONE AT 4023' - 4032'.
 4040-4050 Hard sandstone as above with shale and hard buff to brown limestone stringers.
 4050-4060 Sandstone as above with hard siltstone with shale streaks.
 4060-4070 As above with trace of buff to brown hard sandstone with slight stain.
 4070-4080 As above with streak of buff sandstone as above with slight stain.
 4080-4090 As above, spotty stain.
 SANDSTONE AT 4064' - 4072'.

TRIP BIT #19 at 4097'.

4090-4100 As above with buff sandstone with slight stain, probably from diesel.

4100-4110 Sandstone buff to light gray, very fine, hard, low porosity, light medium to gray with green shale.

4110-4120 Light to medium gray sandstone with shale lams, streaks of white clay filled sandstone, hard low porosity.

4120-4130 Streak of brown to dark brown hard shale with buff limestone with ostracodol streaks.

4130-4140 Hard, light gray very fine sandstone with siltstone and shale as above.

4140-4150 Sandstone white light gray, very fine, hard, slightly micaceous, calcareous and glauconitic. Low to poor porosity, no show.

Sandstone at 4128'-4135. Streak brown shale with limestone as above, green shale streaks in brown shales.

4150-4160 Brown shales with limestone buff hard ostracods.

4160-4170 As above with trace of hard, very fine light gray sandstone.

4170-4180 Very fine hard sandstone, light gray, no visible stain.

SANDSTONE AT 4159'- 4166'.

4180-4190 As above with shales, trace of light to medium gray with white clay filled sandstone.

4190-4200 Sandstone white to light gray, very fine hard, poorly sorted, clay filled, slightly micaceous, scattered carbonaceous partings.

SANDSTONE AT 4184'- 4196'.

4200-4220 Shales medium to dark gray shales, with brown shale stringers of hard brown to gray sandstone.

4220-4230 As above, predominantly brown shale.

4230-4240 Brown shale with brown ostracodol limestone, some gray shale as above.

4240-4250 Shales as above with thin stringers of hard light gray sandstone.

4250-4260 Interbedded brown and gray shale as above, thin stringers of hard sandstone as above, trace of green shale.

4260-4270 Brown limestone finely crystalline, ostracodol, asphaltic stain on partings and brown shale and marlstone.

LIMESTONE AT 4251'- 4261'.

4270-4280 As above, trace of oolites.

4280-4290 As above with streaks of buff ostracodol limestone with streak of stain.

4290-4300 Sandstone to siltstone, very fine, light gray, silty, hard, low porosity, scattered carbonaceous partings, no stain.

SANDSTONE AT 4288' (Estimated), ostracodol limestone as above, and gray shale as above.

4300-4310 Light gray hard silty sandstone and siltstone low porosity, scattered carbonaceous partings, trace of residual stain, and thin gray and brown shales.

4310-4320 Sandstone as above with streak of white to light gray, hard very fine sandstone, slightly micaceous and arkosic, stringers of limestone and shales as above.

4320-4335 Sandstone as above with streak ostracodol limestone. SANDSTONE AT 4314'-4318', 45 units of gas at 4326'- 4329.

4335-4340 Sandstone white, very fine, hard, trace of limestone as above with trace of live oil in mud and brown and gray shale.

TRIP BIT #20 at 4339'.

4340-4350 Predominantly gray, hard shale with siltstone streaks.

4350-4360 As above.

4360-4370 As above with thin, hard, very fine silty sandstone stringers, streak of brown argillaceous, finely crystalline limestone.

4370-4380 Streak of brown to buff finely crystalline ostracodol limestone with shales as above.

LIMESTONE or SANDSTONE at 4368'- 4370'.

4380-4390 Predominantly gray shale with siltstone as above with traces of green, brown and rose shale.

4390-4400 Sandstone to siltstone, white to light gray, very fine and hard, slightly clay filled in partings with streak of brown shale with buff limestone as above.

4400-4410 Brown and gray shales with sandstone and limestone as above, trace of brown stain in ostracodol limestone.

4410-4420 Shales brown with red to brown and mottled green and gray to gray to brown with siltstone as above.

4420-4230 As above with streak of tan, dense to argillaceous limestone, hard with sandy ostracodol streaks.

4430-4240 Predominantly brown to gray, mottled with green shale and thin, very fine silty sandstone and limestone stringers.

4440-4250 Mottled multi-colored shales as above with streak of buff with brown, hard limestone.

4450-4260 Shales as above, increase in red to brown shale, some bright green shale.

4460-4470 Shale light to medium gray to green with brown as above with siltstone stringers, as above streaks of fissile medium gray shale.

TRIP BIT #21 at 4469'.

4470-4480 Streak white to light gray, hard silty sandstone with shales as above, streak tan shale and buff hard limestone with ostracodol streaks.

4480-4490 Shales as above with less sandstone, trace of ostracodol limestone.

4490-4500 Red to brown and brown to gray hard fissile shale with thin, hard buff limestone stringers, streaks of hard very fine sandstone.

4500-4510 Shales as above with streaks of very glauconitic, shaley sandstone.

4510-4520 Predominantly brown and brown to gray shale with green mottled and marly limestone streaks, thin, hard, silty sandstone streaks.

4520-4530 Shale as above with increase in buff to brown marly limestone, trace of hard, very fine, moss tan to gray sandstone, streaks of dark green, shaly, glauconitic sandstone with shales.

4530-4540 Shales and dark limestone as above, very silty.

4540-4550 As above.

TRIP at 4552'.

4550-4560 Shales brown to dark brown and brown to gray, hard with limy streaks, streak light to medium gray, hard, fine, shaly sandstone.

4560-4570 As above with streak of red to brown shales.

4570-4580 Sandstone light gray, very fine, to siltstone hard, slightly micaceous, low porosity, no shows. SANDSTONE at 4565'- 4570', first sand.

4580-4590 Very fine sandstone as above with hard shales, buff red to brown and medium to dark gray and dark brown. SANDSTONE AT 4577'- 4582', no shows.

4590-4600 Shales as above, very hard with streak very fine sandstone to siltstone as above at 4591'- 4595', no show.

4600-4610 As above with streak of sandstone, as above 4600'- 4602'.

4610-4620 Mottled shales as above with siltstone streaks.

4620-4630 Shales as above with streak of hard, very fine sandstone to siltstone at 4613'- 4616'.

4630-4640 Streak light to gray to white, hard, very fine sandstone to siltstone, as above at 4620'- 4625', trace of saturated sandstone.

4640-4650 Shales as above with thin, hard, siltstone to sandstone stringers.

4650-4660 Sandstone as above, very silty, hard, no shows. SANDSTONE at 4634'- 4640, shales as above.

4660-4670 Shales as above with trace of black petroliferous shale.

4670-4680 Shale as above with thin, hard, silty sandstone streaks. SANDSTONE at 4665'- 4669'.

4680-4690 Shale as above with thin siltstone streaks.

4690-4700 As above. SANDSTONE at 4692'- 4694'.

4700-4710 As above.

4710-4720 Sandstone white to light gray, very fine to siltstone very hard, low porosity, no shows. SANDSTONE at 4713'- 4720'.

4720-4730 As above with shales as above, predominantly light to medium gray.

4730-4740 Hard sandstone with shales, as above predominantly shale.

4740-4750 Predominantly shales brown to gray with thin, very fine, silty, buff to gray, hard sandstone to siltstone streak. (Twisted off at 4748').

4750-4760 As above, predominantly shales.

4760-4770 Sandstone dense, brown to gray, oolitic streaks, low porosity.
SANDSTONE at 4754'-4762', no shows.

4770-4780 Shales light to medium gray and brown to gray, trace of buff claystone, scattered quartzitic crystals, shale at 4764'.

4780-4790 Shales as above with streak of brown shale with brown, hard, silty sandstone streaks, traces of buff limestone. (Twisted off at 4799').

4790-4800 Varicolored brown with gray shales with hard, light gray sandstone stringers.

4800-4805 As above with streak of dark brown shale with brown micro-crystalline limestone, (mainly trip samples).

4805-4810 As above.

4810-4815 Light to medium gray, hard, very fine sandstone to siltstone with shales light to medium gray, hard, silty. SANDSTONE at 4805'-4808'.

4815-4820 Shales as above with streak of hard ostracodol sandy limestone.

4820-4825 As above.

4825-4830 As above with streak of green to gray hard shale.

4830-4835 Shales as above with streak of hard, dark brown to brown limestone.

4835-4840 As above.

TRIP at 4836'.

4840-4845 Sandstone hard, very fine to fine, white to light gray with shales green to gray to blue to gray, trace of saturated sandstone.

4845-4850 Hard shales as above with hard siltstone to very fine siliceous sandstone streak.

4850-4855 As above.

4855-4860 As above with trace of maroon shale and stringers of hard, brown limestone.

4860-4865 Shales as above with hard, light gray siltstone to dense sandstone stringers.
TOP OF SANDSTONE AT 4851'.

4865-4870 As above with streak of hard, very fine sandstone with saturation, apparently low porosity, very slightly cut.

T.D.-4873 Sandstone very fine to fine, poorly sorted, slightly clay filled in partings, poor porosity, 37 units gas. SANDSTONE at 4860'-4866', drilled in 12 minutes, good streaming cut, dull yellow fluorescence.

T.D.-4875 Circulating sample 10 minutes
Saturated sample as above.

Circulating sample 20 minutes
Saturated sandstone as above with shale light medium gray, with stringers of hard, very fine sandstone to siltstone, streaked staining, low porosity.

4875-4880 Trip sample.

4985-4990 Shales medium gray to dark gray with streak of buff to brown finely crystalline argillaceous limestone stringers of hard, very fine sandstone to siltstone.

4990-4995 Shales as above with streak of white to light gray dense sandstone, trace of limestone as above.

TRIP at 4993'.

4995-5000 Mainly trip samples.

5000-5005 Shales light to medium with dark gray and hard silty sandstone stringers, as above trace of buff to brown hard limestone.

5005-5010 Shale with siltstone as above with streak of dark brown shales with hard, very fine brown sandstone streaks.

5010-5015 Gray shales as above with streak of light gray to buff, very fine, hard, silty sandstone.

5015-5020 As above with traces of stain in hard, silty sandstone, thin streak of brown, argillaceous, petroliferous, marly limestone.

SANDSTONE at 4998' - 5003'.

5020-5025 Brown to black petroliferous and fossiliferous shale and marlstone, traces of ostracods, traces of very fine, hard sandstone with stain.

5025-5030 Shales light to medium gray with streaks of hard, very fine buff to white, slightly micaceous sandstone, silty, low porosity, no stain to streaks of solid saturation, dull to fair yellow fluorescence and cut, no gas kick. (Sandstone lags back to 5020' - 5026').

5030-5035 Shale with sandstone streaks as above with streaks of saturation.

5035-5040 Shale light to medium and dark gray with streaks of gray to green and dark gray to sandy shale.

5040-5045 As above with streaks of brown shale with marly streak of fine sandstone as above with saturation.

5045-5050 As above, predominantly shale, light medium with dark gray with siltstone to sandstone stringers.

5050-5055 Shales as above with streak of brown marlstone with traces of stain, streak of very fine, hard sandstone with spotty stain, low porosity.

5055-5060 Shales as above with streaks of very fine, hard sandstone with spotty stain and thin, brown limestone and brown shale.

5060-5065 Predominantly gray and brown shales with thin sandstone, white to buff with spotty stain as above.

5065-5070 As above with sandstone as above.

5070-5075 As above.

5075-5080 Shales as above with streaks of hard, buff to light gray very fine sandstone.

5080-5085 As above with trace of ostracods in dark gray shales.

5085-5090 As above with slight increase in very fine sandstone to siltstone and trace of brown limestone.

5090-5095 As above.

5095-5100 As above with streak of brown shale and brown, dense,

4880-4885 Mainly as above, shales light to medium gray with sandstone white to light gray, very fine to fine, hard and tite, spotty stain, streaks of porosity.

4885-4890 Shale as above with atreaks of hard, buff to gray, very fine sandstone, hard and tite.

4890-4895 Medium gray to brown, hard shale streaks of buff to brown finely crystalline limestone and stringers of hard sandstone.

4895-4900 Predominantly brown, marly shale with limestone as above to trace of hard, very fine sandstone with stain; shales are silty.

4900-4905 As above.

4905-4910 Brown shales as above with increase in gray, hard, silty shale with siltstone streaks.

4910-4915 As above with trace of brown, dense limestone as above, shales becoming more silty, increase in very fine sandstone to siltstone, slightly micaceous.

T.D.-4919 Circulating sample 10 minutes
Shales as above with streak of very fine to fine sandstone, slightly micaceous and calcareous, spotty stain, tite, silty to clay filled, (approximately 7 units of gas), trace of finely crystalline buff to tan limestone.

Circulating sample 20 minutes
Shales with streak of dark brown shale with dark to very dark brown, hard, argillaceous to micro-crystalline limestone streaks.

Circulating sample 30 minutes
Limestone and shale as above.

4920-4925 Brown shale with limestone as above and streak of light gray shale with siltstone.

4925-4930 Brown shale and limestone as above.

4930-4935 Brown limestone with shale as above with streak of light gray shale.

4935-4940 As above with trace of ostracods.

4940-4945 As above with slight increase in gray shales.

4945-4950 Gray shale with siltstone to very fine sandstone, light gray, hard.

4950-4955 As above, (Sandstone increases at 4948').

4955-4960 As above with streaks of very fine, hard, silty sandstone, no stain, trace of hard, very fine sandstone, siliceous, spotty, slight staining.

4960-4965 Gray shale as above with streaks of buff, very fine sandstone streak, dark brown shale with limestone as above. LIMESTONE at 4954'- 4959.

4965-4970 Shales gray as above with increase in very fine light gray to buff sandstone, traces of stain in hard, dense, very fine sandstone.

4970-4975 Shales as above with sandstone stringers as above, streak of dark brown shale with limestone as above.

4975-4980 As above.

4980-4985 Dark brown to black and dark gray shales, petroliferous.

micro-crystalline, slightly ostracodol limestone,
traces of dark brown, silty, hard sandstone.

5100-5105 As above.

5105-5110 As above with trace of hard sandstone with ostracods.

5110-5115 Gray shale as above with streak red to brown shale
and trace of dense limestone as above, trace of hard,
saturated, fine sandstone, dark brown, (very little
silty sandstone as above).

5115-5120 As above.

5120-5125 As above with slight increase in red to green shale
trace of very fine to fine sandstone with saturation.

TRIP at 5123'.

5125-5130 As above with streak of very fine, hard, light gray
sandstone with spotty stain, low porosity, some
limestone as above.

5130-5135 Shale as above with brown to red shale as above,
trace of gray to green shale with gritty, glauconi-
tic sandstone stringers; streak of hard, very fine
to fine sandstone with saturation, poor cut, dull
fluorescence, low porosity.

5135-5140 As above.

T.D.-5144 Circulating sample 15 minutes
Predominantly gray shale with streaks of brown as
above with thin brown limestone, traces of hard,
very fine sandstone with saturation as above.

Circulating sample 30 minutes
Shales as above, traces of hard sandstone with satura-
tion as above.

Circulating sample 40 minutes
Brown to black oil shale with shales as above.

5145-5150 Dark gray to black oil shales.

5150-5160 As above with traces of mica.

5160-5170 Shales as above.

5170-5180 As above with trace of tan to brown dense micro-
crystalline limestone.

5180-5190 Brown to black oil shale with streaks of hard, tan
to brown micro-crystalline limestone as above, ar-
gillaceous, marly.

5190-5200 Shales as above. (Limestone streaks from 5170-5185').

5200-5210 Shales as above with some limestone as above, traces
of very fine hard sandstone, saturation, low porosity.

5210-5220 Shale as above with streak of marly limestone as
above, paper thin, wavy streaks.

5220-5230 As above.

5230-5240 Oil shales as above.

5240-5250 As above with streaks of buff to tan with brown,
hard, argillaceous limestone. (Limestone streaks
at 5237' - 5253').

5250-5260 As above with limestone as above, trace of very hard siliceous, buff sandstone.

5260-5270 As above with limestone as above and streak of light gray to buff, very fine, hard sandstone to siltstone.

5270-5280 Oil shales as above with streaks of light to medium gray shale with traces of very fine sandstone with saturation (residual).

5280-5290 As above with trace of dense finely crystalline to micro-crystalline brown limestone.

5290-5300 As above with marly limestone as above, trace of tan, dense micro-crystalline limestone.

5300-5310 As above.

5310-5320 As above.

5320-5330 Brown shales as above, streak of brown, finely crystalline to sandy limestone, ostracodol, argillaceous with white veins.

TRIP at 5328'.

5330-5340 Predominantly cavings of above.

5340-5350 Shales as above, limestone as above with buff to tan streaks, slightly sandy, trace of dark brown siltstone.

5350-5360 White to light gray siltstone to very fine sandstone slightly calcareous with light to medium gray shales. Traces of ostracodol limestone as above.

5360-5365 Interbedded shales and siltstone with very fine sandstone as above.

5365-5370 As above with increase in very fine sandstone.

5370-5375 As above with traces of red mottled shale.

5375-5380 Mottled shales as above with very fine sandstone with siltstone, sandstone very hard.

5380-5385 Sandstone with shales as above.

5385-5390 Shales as above with siltstone, with sandstone as above with trace of light stain.

5390-5395 As above with streak of brown oil shale with hard, very fine sandstone with stain as above.

5395-5400 As above with increase in brown oil shale and sandstone with stain, no fluorescence, no cut.

5400-5405 Sandstone with siltstone as above, shales as above.

5405-5410 As above.

T.D.-5411 Circulating sample 15 minutes
As above with streak of buff to tan, sandy to coarsely crystalline limestone. Traces of hard, poorly sorted, glassy sandstone with carbonaceous streaks, no cut, no fluorescence, poor porosity and sandstone fine to medium, buff to slightly calcareous, poor porosity, bright yellow fluorescence, slight cut. (15 unit gas kick for 5 minutes).

TOP OF SAND AT 5403'

Circulating sample 30 minutes
Buff, slightly calcareous sandstone as above
with hard, glassy streaks as above with carbo-
naceous material (questionable residual oil),
poor porosity.

Circulating sample 60 minutes
As above.

CORED FROM 5411- 5460' CUT 49' RECOVERED 50'

5460-5470	Cavings.
5470-5480	Shale, medium to dark gray with light gray to green shale with streaks of white to light gray, very fine silty sandstone.
5480-5490	Sandstone, white to light gray, very fine to fine with clay filling, slightly micaceous.
	SANDSTONE at 5476'-5481'.
5490-5500	Black to brown oil shale with streak of fine to medium sandstone, poorly sorted, low porosity, Saturation with residual type oil. No fluorescence, poor cut.
	SANDSTONE at 5486'- 5490'.
5500-5510	Medium to dark gray shale with streaks of white to light gray, hard, silty, very fine to fine sandstone, slightly micaceous.
5510-5520	As above.
5520-5530	Shales as above with streak of brown to black marly oil shale with silty fine to medium sandstone with saturation, as above very silty.
5530-5540	Shales as above with streak of medium to dark gray shale with stringers of hard, very fine silty sandstone, streak of fine to medium, hard, clay filled, white sandstone at 5523'- 5526'.
5540-5550	Light to dark gray shale as above with streak of buff to tan dense to finely crystalline limestone, argillaceous in partings. (Limestone at 5539'-5542).
5550-5560	Shales as above with stringers of very hard silicious very fine sandstone, streak of brown to black shale with saturated sandstone as above.
5560-5570	Black shale with hard, silty, fine to medium saturated sandstone as above, trace of brown limestone, trace of light green to gray shale.
5570-5580	Light to medium gray shale with hard, fine sandstone stringers, white to clay filled, low porosity.
	SANDSTONE at 5558'- 5563'.
5580-5590	Shale, light to medium gray with green and red mottled streak of tan, limey shale, streak of brown marly shale with hard, fine saturated sandstone.
5590-5600	Shales as above with thin streak of brown to tan limestone and brown oil shale with saturated sandstone stringers as above.
5600-5610	Shales as above with increase in brown to black shales, traces of maroon shale.
5610-5620	Predominantly cavings.

TRIP AT 5611'.

- 5620-5630 Sandstone white to light gray, very fine, clay filled to silty and hard, slightly micaceous stringers of medium gray siltstone. SANDSTONE at 5613'- 5617'.
- 5630-5640 Shales as above with streak of dark brown to black shale with associated thin stringers of silty, hard, saturated sandstone.
- 5640-5650 Shales as above with infrequent red mottling and stringers of siltstone and fine, white clay filled sandstone.
- 5650-5660 Shales with streak of brown to black shales with brown marlstone streaks and stringers of hard, very fine, brown sandstone.
- 5660-5670 Gray shales with trace of red and hard, very fine sandstone to siltstone streak, brown shale with hard, very fine saturated sandstone and marlstone, trace of oolitic sandstone, trace of ostracodol limestone. SANDSTONE at 5654'- 5663'.
- 5670-5680 Mottled gray shale as above and brown to black marly, ostracodol shale, traces of green silty shale, trace of pyrite, trace of oolitic sandstone, buff, hard.
- 5680-5690 Gray shale with very fine white slightly micaceous sandstone stringers and brown to black shales and marlstone, streak of brown ostracodol limestone, argillaceous, medium crystalline.
- 5690-5700 Gray shale and very fine, white sandstone as above, streak of dark brown to black shale with marlstone and streak brown ostracodol limestone, streaks with veins, dense, marly.
- ESTIMATED TOP OF BROWN LIMESTONE AT 5689',
PROBABLY TOP OF GREEN RIVER TONGUE.
- 5700-5710 Sandstone buff to light gray, very fine to fine, hard, slightly micaceous and shales medium to dark gray and brown to gray with hard, silty, saturated sandstone stringers, as above, traces of tan to brown ostracodol limestone.
- 5710-5720 As above with less light gray sandstone and increase in brown shale and limestone and saturated sandstone as above.
- 5720-5730 Predominantly shales as above with trace of ostracodol limestone.
- 5730-5740 As above.
- 5740-5750 As above.
- 5750-5760 As above with hard silty sandstone stringers with marlstone.
- 5760-5770 As above with streaks of tan to green marlstone.
- 5770-5780 Predominantly shale as above, slightly mottled with red and marlstone, trace of veined, tan limestone.
- 5780-5790 As above, traces of varved shale.
- 5790-5800 As above with shales mottled with light gray to green streaks, predominantly very dark brown to black oil shale.
- 5800-5810 As above.

5810-5820 As above.
 5820-5830 As above with stringers of hard, silty sandstone with saturation.
 5830-5840 As above with streaks of hard sandstone with saturation, low porosity. (Giving up gas kicks, TOP OF SANDSTONE AT 5828').
 5840-5850 Oil shales with sandstone as above with streak of light gray to green shale with stringers of hard, fine, slightly micaceous, light gray sandstone, gas kicks as above.
 5850-5860 Brown oil shale with sandstone as above with mottled light gray to green and trace of maroon, gas kicks.
 5860-5870 As above with stringers of hard, buff to tan, marly limestone and marlstone. Mottled shale as above.
 5870-5880 Predominantly oil shale with sandstone as above.
 5880-5890 As above with streak of hard, dense to finely crystalline, brown veined limestone.
 5890-5900 As above with slight increase in mottled shales with siltstone streaks of very fine, light gray, silty, slightly micaceous sandstone, trace of dark green, silty streaks.
 5900-5910 Shales as above, trace of red shale.

TRIP at 5908'.

5910-5920 Cavings.
 5920-5930 Medium to dark gray and brown shale, trace of white, fine sandstone.
 5930-5940 As above with trace of red mottled shale.
 5940-5950 As above with trace of ostracodol limestone.
 5950-5960 Predominantly light to medium gray shale with siltstone, trace of buff and red shale.
 5960-5970 Light gray shale with siltstone with streaks of brown shale and silty sandstone with saturation.
 5970-5980 As above with streaks of light gray to green, very hard, silty sandstone.
 5980-5990 Predominantly light gray to green shales.
 5990-6000 As above with streaks of brown shale with tan marlstone, trace of maroon mottling, trace of white, very hard sandstone.

T.D.-6000 Circulating sample 40 minutes
 Shales as above.

Circulating sample 60 minutes
 Shales as above with brown shale, trace of fine, hard, silty, saturated sandstone.

February 24, 1964

C
O
P
Y

Davis Oil Company
1020 Midland Savings Building
Denver, Colorado

Attn: Mr. E. L. Karn, Jr.

Gentlemen:

This is to notify you that the graded ground elevation on your Pariette Bench Unit Well #5 in the SE/4 - SE/4 Section 9, T9S, R18E, SLB&M is 4993.99'. This elevation was run from and is based on the vertical angle Bench Mark elevation on the SE corner of Section 16.

We have also tied the elevation to a new U.S.G.S. Bench Mark in Section 8 but Mr. Waananen of the Roosevelt office informs us it will be several days before they have the elevation of this new Bench Mark figured. When these new figures are available we will compare them and should there be any significant difference we will report it to you.

Please advise if we can be of further service.

Very truly yours,

ROSS CONSTRUCTION COMPANY

RDR: wj

By: R. D. Ross

Copy to:

U.S.G.S.
Oil & Gas Branch
231 E. 4th South
Salt Lake City, Utah

State of Utah
Oil & Gas Conservation Commission
Salt Lake City, Utah

March 9, 1964

C
O
P
Y

Davis Oil Company
1020 Midland Savings Building
Denver, Colorado

Attn: Mr. E. L. Karn, Jr.

Gentlemen:

Please refer to our letter of February 24, 1964 regarding elevation of your Pariette Bench Unit Well #5.

The U.S. G. S. office in Roosevelt has completed work on the Bench Mark line running through this area and there is a 16.74' error in the VABM on the SE corner of Section 16, which we used. Therefore we wish to submit a corrected ground elevation for above well of 4977.25'. ✓

The new U.S.G.S bench mark used is numbered and stamped "14EAM 1964" and is located in Section 8, T9S, R18E, SLB&M.

Very truly yours,

ROSS CONSTRUCTION COMPANY

RDR: wj

By: R. D. Ross

Copy to:

U.S.G.S.
Oil & Gas Branch
231 E. 4th South
Salt Lake City, Utah

State of Utah ✓
Oil & Gas Conservation Commission
Salt Lake City, Utah

12.

PLUGGING PROGRAM FORM

1 copy
1 ID
1 file
1 10

Name of Company Davis Oil Co. Verbal Approval Given To: John Evinger
789-1131 Normal

Well Name: Periote Ranch # 5 Sec. 9 T. 9S R. 18E County: Utah

Verbal Approval was given to plug the above mentioned well in the following manner:

set Cast-iron plug above present
perforation (3786) and set cement (2 ss=16)
This is only a temporary plug only.
In near future perforation will
be squeezed and additional plugs
set in accordance with U. S. & S.

Date Verbally Approved: May 4, 1964 Signed: Paul W. Burchell
CC: H. L. Coonts, Pet. Eng., Oil & Gas Conservation Commission, Moab, Utah

George Brown, Acting Dist. Eng., U. S. Geological Survey, Salt Lake City, Utah

July 28, 1964

On July 27, 1964, Mr. Rodney Smith, District Engineer for the U.S. Geological Survey, informed me that the following plugged wells have been satisfactorily abandoned and approved by his agency:

Morris Rosenblatt, Well No. Federal #1,
NE NE Sec. 20, T. 23 S., R. 17 E., Grand County, Utah

Walter D. Broadhead, Well No. Keas Federal 5-75,
NE SE Sec. 5, T. 20 S., R. 24 E., Grand County, Utah

Honolulu Oil Corporation, Well No. Bitter Creek #1,
SW SE Sec. 30, T. 11 S., R. 23 E., Uintah County, Utah

H. P. McLish, Well No. Government Walton #1,
SE SW Sec. 9, T. 8 S., R. 23 E., Uintah County, Utah

Davis Oil Company, Well No. Pariette Bench Unit #5,
SE SE Sec. 9, T. 9 S., R. 18 E., Uintah County, Utah

Sinclair Oil & Gas Company, Well No. Uintah Federal #178-1,
SW SW Sec. 24, T. 12 S., R. 22 E., Uintah County, Utah

Shamrock Oil & Gas Corporation, Well No. Rock House Unit #10,
SE NE Sec. 22, T. 11 S., R. 23 E., Uintah County, Utah

California Oil Company, Well No. Red Wash #187 (32-31C),
SW NE Sec. 31, T. 7 S., R. 24 E., Uintah County, Utah

California Oil Company, Well No. White River Unit #14 (32-3D),
SW NE Sec. 3, T. 8 S., R. 22 E., Uintah County, Utah

C. F. Raymond, Well No. Government #1,
NW NW Sec. 17, T. 13 S., R. 24 E., Uintah County, Utah

Pan American Petroleum Corporation, Well No. USA Lyle O. Lingelbach #1,
SE SE Sec. 29, T. 6 S., R. 21 E., Uintah County, Utah

Pan American Petroleum Corporation, Well No. McLish Unit #1,
SW SE Sec. 34, T. 6 S., R. 22 E., Uintah County, Utah

October 23, 1964

Davis Oil Company
1020 Midland Savings Building
Denver, Colorado

Re: Well No. Pariette Bench Unit #5
Sec. 9, T. 9 S., R. 13 E.,
Uintah County, Utah

Gentlemen:

This letter is to advise you that the electric and/or radioactivity logs for the above mentioned well are due and have not been filed with this Commission as required by our rules and regulations.

Thank you for your cooperation in this request.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

KATHY G. WAINER
RECORDS CLERK

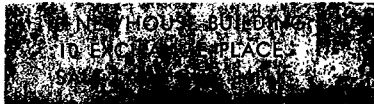
KGW:cnp

COMMISSIONERS
C. R. HENDERSON
CHAIRMAN
M. V. HATCH
C. S. THOMSON
B. H. CROFT
C. P. OLSON
EXECUTIVE DIRECTOR
C. B. FEIGHT



PETROLEUM ENGINEERS
PAUL W. BURCHELL
CHIEF ENGINEER
SALT LAKE CITY
HARVEY L. COONTS
BOX 266
MOAB, UTAH

THE STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION



348 East South Temple
Suite 301
Salt Lake City, Utah
October 23, 1964

Davis Oil Company
1020 Midland Savings Building
Denver, Colorado

Re: Well No. Pariette Bench Unit #5
Sec. 9, T. 9 S., R. 18 E.,
Uintah County, Utah

Gentlemen:

This letter is to advise you that the electric and/or radioactivity logs for the above mentioned well are due and have not been filed with this Commission as required by our rules and regulations.

Thank you for your cooperation in this request.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

Kathy G. Warner
KATHY G. WARNER
RECORDS CLERK

KGW:cnp



DAVIS OIL COMPANY

OIL
PRODUCERS

1020 MIDLAND SAVING BLDG. • DENVER, COLORADO • 255-4661

511 - 5TH AVENUE
NEW YORK 17, N. Y.
NEW ORLEANS, LA.

26 October 1964

THE STATE OF UTAH
Oil & Gas Conservation Commission
Suite 301, 348 East South Temple
Salt Lake City, Utah

Attention: Kathy G. Warner

RE: PARIETTE BENCH UNIT #5
Section 9, T 9 S, R 18 E
Uintah County, Utah

Gentlemen:

Pursuant to your letter of October 23, 1964, enclosed please
find two copies of the logs you requested.

Thank you for calling our attention to this oversight.

Very truly yours,

DAVIS OIL COMPANY

Don E. Mettler

Don E. Mettler
Geologist

dem/m

April 23, 1965

Davis Oil Company
1020 Midland Savings Building
Denver, Colorado

Attention: Mr. Don E. Mettler, Geologist

Re: Well No. Pariette Bench Unit #5
Sec. 9, T. 9 S., R. 18 E.,
Uintah County, Utah

Dear Mr. Mettler:

This letter is to advise you that the Subsequent Report of Abandonment and Plugging of the above mentioned well is due and has not been filed with this Commission as required by Rule D-2, General Rules and Regulations and Rules of Practice and Procedure, Utah State Oil and Gas Conservation Commission. We would also appreciate the date that this well was plugged and abandoned and the manner in which it was plugged.

Thank you.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

KATHY G. WARNER
RECORDS CLERK

kgw

Enclosure - Forms

DAVIS OIL COMPANY

OIL
PRODUCERS

1230 MIDLAND SAVING BLDG. • DENVER, COLORADO • 255-4661
1230 DENVER CLUB BLDG. • 80202

511 - 5TH AVENUE
NEW YORK 17, N. Y.
NEW ORLEANS, LA.

27 April 1965

Ms. Kathy G. Warner
Utah Oil & Gas Conservation Commission
Suite 301, 348 East South Temple
Salt Lake City, Utah

RE: Pariette Bench Unit #5
SE SE Sec. 9-9S-18E
Uintah County, Utah

Dear Ms. Warner:

Pursuant to your letter of April 23, 1965, addressed to our Mr. Don Mettler, enclosed please find an original and two copies of the Subsequent Report of Abandonment covering the plugging of the above captioned well.

We are sorry for the delay in submitting this report to you.

Very truly yours,

DAVIS OIL COMPANY

E. L. Karn, Jr.

E. L. Karn, Jr.
Production Manager

sm

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

5. LEASE DESIGNATION AND SERIAL NO.

USA Utah 019887

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Pariette Bench

9. WELL NO.

Unit No. 5

10. FIELD AND POOL, OR WILDCAT

Pariette Bench Unit-stepout

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 9-9S-18E

12. COUNTY OR PARISH

Uintah

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1.

OIL WELL ☐ GAS WELL ☐ OTHER ☒

Dry Hole

2. NAME OF OPERATOR

Davis Oil Company

3. ADDRESS OF OPERATOR

1230 Denver Club Building - Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

660' FSL - 660' FEL Section 9

43.047.10298

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☒

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

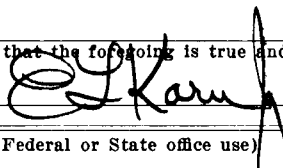
In line with the Verbal Approval to Plug and Abandon, given by Mr. Rodney Smith, Operator has plugged subject well as follows on 5-5-64:

Wire line bridge plug was set at 4946'. Was squeezed with 150 sx at 4850 thru perf.
Wire line bridge plug was set at 3829'.
Wire line bridge plug was set at 3750' with 4 sx cmt. on top.
Perforated csg. at 1600' (Parachute Member of Green River Formation) and squeezed 25 sx cmt. in formation and left 25 sx cmt. in csg. Loaded hole with heavy fluid. Pumped 50 sx of cmt. in annulus between 5½" csg. and 9 5/8" csg., then pumped 25 sx cmt. in the top of the 5½" csg. A regulation dry hole marker has been installed and location has been cleaned up and leveled and the pits have been filled.

Location is now ready for inspection.

18. I hereby certify that the foregoing is true and correct

SIGNED


TITLE Production ManagerDATE 4-27-65

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE